

The Examiner rejected claims 1-8 under 35 USC 112, second paragraph.

The Examiner rejected claims 1-8 under 35 USC 103(a) over McCormick in view of Matsumura.

Rejections Under 35 USC 112

In claims 1-2, 5, and 7-8, the Examiner objects to the term “carried within”, arguing that the transformers cannot be carried within the package. The Examiner argues that the transformers are a part of the package. Applicant respectfully traverses, but has removed the term “carried”, since the transformers are clearly “within” the package, whether carried or contained within the package or forming a part of the package.

The Examiner objects to the term “the foot seating plane of the package”, stating that it lacks an antecedent basis. Applicant has amended to recite “the surface of a printed circuit board”, being analogous to “the foot seating plane of the package”, to further clarify that the spacing between a portion of the terminal and the surface of a printed circuit board is intended.

The Examiner objects to “the wall” on line 7 of claim 2, arguing that there is no antecedent. Applicant has amended claim 2 to read “the side wall” rather than “the wall”, and respectfully submits that as amended claim 2 is now more clearly recited.

It is believed that claims 1-8 as amended are in compliance with 35 USC 112, second paragraph.

Rejections Under 35 USC 103(a)

The Examiner rejected claims 1-8 under 35 USC 103(a) over McCormick in view of Matsumura. The Examiner argues that McCormick discloses “a plurality of terminal pins

molded within the side wall of the package”. The Examiner further argues that McCormick discloses “one end of the terminal pin forming a solder post extending through and below a bottom of the side wall; [figures 1, 2].”

Applicant respectfully traverses. It is believed that McCormick shows two principal packages:

1. A first package with loose terminal pins inserted through holes in a package or header, and
2. A second package with the terminal pins plated onto interior surfaces of the package.

Applicant respectfully submits that the first package of McCormick requires that the pins be loose with respect to the package, not molded within. The pins in this package are partially, but not fully, inserted into the package, which may have been molded, and the wires from the transformers are then soldered onto the pins. The pins are then fully inserted into the package. Since McCormick requires the soldering be done after the package is molded (for a molded package) but before the pins are fully inserted, the pins cannot be molded into the package. Applicant respectfully submits a “terminal pin molded” within the package is not shown or taught by McCormick.

Applicant respectfully submits that the second package of McCormick has the terminal pins plated onto an interior surface of the package after the package is molded. It is submitted that the pins cannot be molded into the package; that is, a “terminal pin molded” within the package is not taught by McCormick; rather the pins are plated on the molded package.

Applicant respectfully submits that the terminal pins of Matsumura do not teach a gull wing terminal pin molded within the side wall of the package. Applicant respectfully submits that neither the Z shape pin of Matsumura nor the gull wing terminal pin of the prior art discussed by Matsumura could be partially inserted in a completed molded package, soldered,

then fully inserted as in the first package of McCormick. Applicant respectfully submits that neither the Z shape pin of Matsumura nor a gull wing terminal pin discussed by Matsumura could be plated onto a package as taught for the second package of McCormick.

The Examiner argues that Matsumura teaches end walls having a first height H1 to form a standoff between the foot seating plane (the surface of a printed circuit board in the claims as amended) and the terminal pins. The Examiner also argues that Matsumura teaches an outer portion of the side wall extending between the end walls and having a second height H2.

Applicant respectfully traverses. Matsumura, in figure 10A of Matsumura, shows a housing or package with side walls and end walls of the same height. Matsumura does not show or teach a package with side walls having a height H1 and end walls having a second height H2.

Applicant respectfully submits that the purpose of a height H1 and a second height H2 is to provide a standoff for the terminal pins molded into the side walls, and the side walls, with the higher end walls. Matsumura does not show or teach providing a standoff for his terminal pins or his side walls with higher end walls, and does not show or teach a standoff as in the present invention. The standoff provided by Matsumura for his terminal pins is the vertical portions of the pins themselves, with the side walls providing only horizontal support for the terminal pins, if any.

Applicant respectfully submits that neither McCormick or Matsumura show or teach the simple, one piece, molded package of Applicant.

Another version of the claims is separately attached herewith in accordance with 37 CFR 1.121 c.

In view of the above, Applicant respectfully submits this application is now in a condition for allowance.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Stephen E. Baldwin". The signature is fluid and cursive, with a horizontal line drawn underneath the name.

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37 CFR 1.121 (c) Version of Claims

1. (Once Amended) An electronic surface mount package for mounting onto the surface of a printed circuit board comprising:

a one piece construction package having end walls, a side wall and an open bottom,
a plurality of toroid transformers [carried] within said package by a soft silicone material,
said toroid transformers each having wires wrapped thereon;

a plurality of terminal pins molded within and extending from the bottom of said package, each of said pins extending through a bottom portion of said side wall and below the inner portion of said side wall and having a notched solder post upon which said wires from said transformers are wrapped and soldered thereon, respectively;

said end walls having a first height H1 to form a standoff or safe guard between [the foot seating plane of said package] the surface of a printed circuit board and said terminal pins;

the outer portion of said side wall extending between said end walls and having a second height H2 which is less than said first height H1.

2. (Once Amended) An electronic surface mount package for mounting onto the surface of a printed circuit board comprising:

a construction package having end walls, a side wall and an open bottom,
a plurality of toroid transformers [carried] within said package by a soft silicone material,
said toroid transformers each having wires wrapped thereon,

a plurality of terminal pins molded within and extending from the bottom of said package, each of said pins extending through a bottom portion of said side wall and below the

inner portion of said side wall and having a notched solder post upon which said wires from said transformers are wrapped and soldered thereon, respectively.

said end walls having a first height H1 to form a standoff or safe guard between [the foot seating plane of said package] the surface of a printed circuit board and said terminal pins;

the outer portion of said side wall extending between said end walls and having a second height H2 which is less than said first height H1.

5. (Once Amended) An electronic surface mount package for mounting onto the surface of a printed circuit board in an electronic device, said electronic surface mount package comprising:

a one piece construction package having end walls, a side wall and an open bottom,

a plurality of toroid transformers [carried] within said package by a soft silicone material, said toroid transformers each having wires wrapped thereon,

a plurality of terminal pins molded within and extending from the bottom of said package, each of said pins extending through a bottom portion of said side wall and below the inner portion of said side wall and having a notched solder post upon which said wires from said transformers are wrapped and soldered thereon, respectively,

said end walls having a first height H1 to form a standoff or safe guard between [the foot seating plane of said package] the surface of a printed circuit board and said terminal pins;

the outer portion of said side wall extending between said end walls and having a second height H2 which is less than said first height H1.

7. (Once Amended) An electronic surface mount package for mounting onto the surface

of a printed circuit board comprising:

a construction package having end walls, a side wall and an open bottom,

at least one toroid transformer [carried] within said package by a soft silicone material,
said toroid transformer having a wire wrapped thereon,

at least one terminal pin molded within and extending from the bottom of said package,
said pin extending through a bottom portion of said side wall and below the inner portion of said
side wall and having a notched solder post upon which said wire from said transformer is
wrapped and soldered thereon,

said end walls having a first height H1 to form a standoff or safe guard between [the foot
seating plane of said package] the surface of a printed circuit board and said terminal pins;

the outer portion of said side wall extending between said end walls and having a second
height H2 which is less than said first height H1.

8. (Once Amended) An electronic surface mount package for mounting onto the surface
of a printed circuit board in an electronic device, said package comprising:

a one piece open construction package having end walls, side walls and an open [botom]
bottom,

a plurality of toroid transformers [carried] within said package, said toroid transformers
each having a side wall and wires wound thereon,

a plurality of terminal pins molded within and extending through a bottom of said side
wall and below the inner portion of said side wall, each of said pins having a hour-glass shaped
notched solder post upon which said wires from said transformers are wrapped thereon,
respectively,

said end walls having a first height H1 to form a standoff or safe guard between [the foot seating plane of said package] the surface of a printed circuit board and said terminal pins;

the outer portion of said side wall extending between said end walls and having a second height H2 which is less than said first height H1.